

## IN THE CLAIMS

Please amend the claims as follows.

- 1 1. (Currently Amended) An apparatus comprising:  
2 at least one processor;  
3 a memory coupled to the at least one processor;  
4 a database residing in the memory; [[and]]  
5 a range constraint defined for the database, the range constraint including at least  
6 one limit that is dynamically determined from data in the database; and  
7 a database manager residing in the memory and executed by the at least one  
8 processor, wherein the range constraint defines a range that includes the at least one limit,  
9 and wherein the database manager allows entry of data into the database when the data  
10 lies within the range.
- 1 2. (Original) The apparatus of claim 1 wherein the database comprises at least one  
2 database table comprising at least one column, and wherein the range constraint is  
3 defined for a selected column.
- 1 3. (Original) The apparatus of claim 2 wherein the at least one limit is dynamically  
2 determined from data in the selected column.
- 1 4. (Original) The apparatus of claim 2 wherein the at least one limit is dynamically  
2 determined from data in a column that is different than the selected column.
- 1 5. (Original) The apparatus of claim 1 wherein the at least one limit is dynamically  
2 determined by performing statistical analysis on data in the database.

1 6. (Currently Amended) The apparatus of claim 1 ~~further comprising a database manager~~  
2 ~~residing in the memory and executed by the at least one processor~~; wherein the range  
3 constraint defines a range that includes the at least one limit, and wherein the database  
4 manager allows entry of data into the database ~~only~~ when the data lies within the defined  
5 range and does not allow entry of data into the database when the data lies outside the  
6 defined range.

1 7. (Currently Amended) The apparatus of claim 1 ~~further comprising a database manager~~  
2 ~~residing in the memory and executed by the at least one processor~~; wherein the range  
3 constraint defines a range that includes the at least one limit, and wherein:  
4 if the data lies within the defined range, the database manager allows entry of the  
5 data into the database; and  
6 if the data lies outside of the defined range, the database manager allows entry of  
7 the data into the database and provides a warning message.

1 8. (Currently Amended) An apparatus comprising:  
2 at least one processor;  
3 a memory coupled to the at least one processor;  
4 a database table residing in the memory, the database table including at least one  
5 column; [[and]]  
6 a range constraint defined for a selected column in the database table, the range  
7 constraint defining a range that includes at least one limit that is dynamically determined  
8 from data in the selected column; and  
9 a database manager residing in the memory and executed by the at least one  
10 processor, the database manager allowing entry of data into the selected column when the  
11 data lies within the defined range.

1 9. (Currently Amended) The apparatus of claim 8 ~~further comprising a database manager~~  
2 ~~residing in the memory and executed by the at least one processor; wherein~~ the database  
3 manager ~~allowing~~ allows entry of data into the selected column ~~only~~ when the data lies  
4 within the defined range and does not allow entry of data into the database when the data  
5 lies outside the defined range.

1 10. (Currently Amended) The apparatus of claim 8 ~~further comprising a database~~  
2 ~~manager residing in the memory and executed by the at least one processor; wherein~~ the  
3 database manager ~~allowing~~ allows entry of data into the selected column when the data  
4 lies outside the defined range and in response thereto, providing provides a warning  
5 message.

1 11. (Original) The apparatus of claim 8 wherein the at least one limit is dynamically  
2 determined by performing statistical analysis on data in the selected column.

1 12. (Currently Amended) An apparatus comprising:  
2 at least one processor;  
3 a memory coupled to the at least one processor;  
4 a database table residing in the memory, the database table including at least one  
5 column; [[and]]  
6 a range constraint defined for a selected column in the database table, the range  
7 constraint defining a range that includes at least one limit that is dynamically determined  
8 from data in a column that is different than the selected column; and  
9 a database manager residing in the memory and executed by the at least one  
10 processor, the database manager allowing entry of data into the selected column when the  
11 data lies within the defined range.

1 13. (Currently Amended) The apparatus of claim 12 ~~further comprising a database~~  
2 ~~manager residing in the memory and executed by the at least one processor; wherein~~ the  
3 database manager ~~allowing~~ allows entry of data into the selected column ~~only~~ when the  
4 data lies within the defined range and does not allow entry of data into the selected  
5 column when the data lies outside the defined range.

1 14. (Currently Amended) The apparatus of claim 12 ~~further comprising a database~~  
2 ~~manager residing in the memory and executed by the at least one processor; wherein~~ the  
3 database manager ~~allowing~~ allows entry of data into the selected column when the data  
4 lies outside the defined range and in response thereto, ~~providing~~ provides a warning  
5 message.

1 15. (Original) The apparatus of claim 12 wherein the at least one limit is dynamically  
2 determined by performing statistical analysis on data in the different column.

- 1 16. (Currently Amended) A computer-implemented method for ~~defining a dynamic range~~  
2 ~~constraint entering data~~ in a database, the method comprising the steps of:  
3 (A) defining a range constraint for a selected portion of the database; [[and]]  
4 (B) defining at least one limit for the range constraint that is dynamically  
5 determined from data in the database; and  
6 (C) allowing entry of data into the selected portion of the database when the data  
7 lies within a range defined by the range constraint.
- 1 17. (Original) The method of claim 16 wherein the database comprises at least one table  
2 comprising at least one column, and wherein the selected portion comprises a selected  
3 column.
- 1 18. (Original) The method of claim 17 wherein step (B) defines at least one limit that is  
2 dynamically determined from data in the selected column.
- 1 19. (Original) The method of claim 17 wherein step (B) defines at least one limit that is  
2 dynamically determined from data in a column that is different than the selected column.
- 1 20. (Original) The method of claim 16 wherein step (B) defines at least one limit that is  
2 dynamically determined by performing statistical analysis on data in the database.

- 1 21. (Original) A computer-implemented method for limiting data entry into a selected  
2 column in a database table, the method comprising the steps of:
- 3 (A) defining a range constraint for the selected column, the range constraint  
4 defining a range that includes at least one limit that is dynamically determined from data  
5 in the database table; and
- 6 (B) allowing entry of data into the selected column only when the data to be  
7 entered lies within the defined range.
- 1 22. (Original) The method of claim 21 wherein step (A) defines at least one limit that is  
2 dynamically determined from data in the selected column.
- 1 23. (Original) The method of claim 21 wherein step (A) defines at least one limit that is  
2 dynamically determined from data in a column that is different than the selected column.
- 1 24. (Original) The method of claim 21 wherein step (A) defines at least one limit that is  
2 dynamically determined by performing statistical analysis on data in the database table.

- 1 25. (Currently Amended) A computer-implemented method for ~~limiting~~ entering data  
2 entry into a selected column in a database table, the method comprising the steps of:  
3 (A) defining a range constraint for the selected column, the range constraint  
4 defining a range that includes at least one limit that is dynamically determined from data  
5 in the database table; and  
6 (B) if the data to be entered lies outside of the defined range, allowing entry of  
7 data into the selected column, and in response thereto, providing a warning message.
- 1 26. (Original) The method of claim 25 wherein step (A) defines at least one limit that is  
2 dynamically determined from data in the selected column.
- 1 27. (Original) The method of claim 25 wherein step (A) defines at least one limit that is  
2 dynamically determined from data in a column that is different than the selected column.
- 1 28. (Original) The method of claim 25 wherein step (A) defines at least one limit that is  
2 dynamically determined by performing statistical analysis on data in the database table.

- 1 29. (Currently Amended) A computer-readable program product comprising:  
2 (A) a database manager that allows defining a range constraint for a database, the  
3 range constraint including at least one limit that is dynamically determined from data in  
4 the database, the database manager allowing entry of data into the database when the data  
5 lies within a range defined by the range constraint; and  
6 (B) computer-readable ~~signal bearing~~ recordable media bearing the database  
7 manager.
- 1 30-31 (Cancelled)
- 1 32. (Original) The program product of claim 29 wherein the database comprises at least  
2 one database table comprising at least one column, and wherein the range constraint is  
3 defined for a selected column.
- 1 33. (Original) The program product of claim 32 wherein the at least one limit is  
2 dynamically determined from data in the selected column.
- 1 34. (Original) The program product of claim 32 wherein the at least one limit is  
2 dynamically determined from data in a column that is different than the selected column.
- 1 35. (Original) The program product of claim 29 wherein the at least one limit is  
2 dynamically determined by performing statistical analysis on data in the database.
- 1 36. (Currently Amended) The program product of claim 29 wherein the range constraint  
2 defines a range that includes the at least one limit, and wherein the database manager  
3 allows entry of data into the database ~~only~~ when the data lies within the defined range and  
4 does not allow entry of data into the database when the data lies outside the defined  
5 range.



1 37. (Original) The program product of claim 29 wherein the range constraint defines a  
2 range that includes the at least one limit, and wherein the database manager allows entry  
3 of data into the database and provides a warning message when the data lies outside the  
4 defined range.

1 38. (Currently Amended) A computer-readable program product comprising:

2 (A) a database manager that allows defining a range constraint for a selected  
3 column in a database table, the range constraint defining a range that includes at least one  
4 limit that is dynamically determined from data in the selected column, the database  
5 manager allowing entry of data into the selected column when the data lies within the  
6 defined range; and

7 (B) computer-readable ~~signal bearing~~ recordable media bearing the database  
8 manager.

1 39-40 (Cancelled)

1 41. (Currently Amended) The program product of claim 38 wherein the database  
2 manager allows entry of data into the selected column ~~only~~ when the data lies within the  
3 defined range and does not allow entry of data into the database when the data lies outside  
4 the defined range.

1 42. (Original) The program product of claim 38 wherein the database manager allows  
2 entry of data into the selected column and provides a warning message when the data lies  
3 outside the defined range.

1 43. (Currently Amended) A computer-readable program product comprising:  
2 (A) a database manager that allows defining a range constraint for a selected  
3 column in a database table, the range constraint defining a range that includes at least one  
4 limit that is dynamically determined from data in a column that is different than the  
5 selected column, the database manager allowing entry of data into the selected column  
6 when the data lies within the defined range; and  
7 (B) computer-readable ~~signal bearing~~ recordable media bearing the database  
8 manager.

1 44-45 (Cancelled)

1 46. (Currently Amended) The program product of claim 43 wherein the database  
2 manager allows entry of data into the selected column only when the data lies within the  
3 defined range and does not allow entry of data into the database when the data lies outside  
4 the defined range.

1 47. (Original) The program product of claim 43 wherein the database manager allows  
2 entry of data into the selected column and provides a warning message when the data lies  
3 outside the defined range.